

SITE CODE: A23N

CERCLIS CODE: NYN000206697

EPA SITE/PROJECT NAME: 738 Upper Mountain Road Radiological Site (738 UMR)

ADDRESS: 738 Upper Mountain Road

CITY/STATE: Lewiston, NY 14092

COUNTY: Niagara Falls; Parcel #: 115.08-1-26 & 115.08-1-27

The 738 Upper Mountain Road (738 UMR) Site (EPA ID No. NYN000206697) consists of a small area of radionuclide contamination located at geographic coordinates 43.15553, -79.02245 (tax parcel 115.08-1-27) in Lewiston, NY. The area of observed contamination is approximately 1,493 square feet (ft<sup>2</sup>) and is located on the vacant parcel 115.08-1-27, which is owned by Talarico Bros. Building Corp (TBBC) and covers approximately 10.2 acres. The area of observed contamination is located at the entrance of the driveway that is currently utilized by the 738 Upper Mountain Road residence, although was historically used as an access road to the vacant property owned by TBBC. The residence is on a separate property from the area of contamination. The 738 UMR site is bordered to the north by Upper Mountain Road, residential properties, and a further wooded area; to the east and west by residential properties; and to the south by a wooded area.

In July 1985, members of the Radiological Survey Activities (RSA) group at Oak Ridge National Laboratory (ORNL) performed the radiological survey of 738 Upper Mountain Road, which documented a maximum gamma exposure rate of 710 microRoentgens per hour (μR/hr). The area with these readings was an area approximately 10 feet wide by 59 feet in length along a ditch and gravel residential driveway. The survey showed that the 738 Upper Mountain Road anomaly is associated with the asphalt driveway that contained a phosphate slag material. This rocky-slag waste material was used for bedding under asphalt surfaces and in general gravel applications at the UMR site and 61 other locations in the Niagara Falls area identified by ORNL. Biased surface soil samples collected in conjunction with the study indicated the presence of radium-226 (Ra-226), uranium-238 (U-238), and thorium-232 (Th-232) at the 738 UMR site. The subsequent November 1986 report stated that all the contaminated soil and rock samples collected had approximately equal concentrations of Ra-226 and U-238, which suggested to the investigators that the rocks probably originated from a singular source. The origin of the thorium-bearing material was unknown; the report postulated that its source was from some type of mineral extraction activity in the Niagara Falls area. The report stated that the 738 Upper Mountain Road anomaly was not related to materials connected with Niagara Falls Storage Site (NFSS), including materials that were transported to NFSS.

During a reconnaissance performed by the New York State Department of Health (NYSDOH) and New York State Department of Environmental Conservation (NYSDEC) on July 9, 2013, screening activities showed radiation levels at 300 μR/hr with a hand-held pressurized ion chamber (PIC) and 105,000-110,000 counts per minute (CPM) with a sodium iodide (NaI) 2x2

scintillation detector; the singular reading was taken at the end of the driveway adjacent to Upper Mountain Road.

The Site was referred to the U.S. Environmental Protection Agency (EPA) by the NYSDEC and the NYSDOH on July 21, 2013 to assess the Site for a potential CERCLA response action

On December 12, 2013, USEPA Pre-Remedial Program and Weston Solutions, Inc. personnel collected a total of nine soil samples (including one environmental duplicate sample) and two slag samples from the Upper Mountain Road site. Soil samples were also collected from two locations suspected to be outside the influence of the area of observed contamination to document background conditions. At each sample location, soil samples were collected directly beneath slag material; at locations where a radioactive layer was not present, the soil sample was collected at the equivalent depth interval. The slag samples consisted of pulverized silty sand with rocks, cobbles, and gravel (i.e., radioactive waste material mixture) rather than singular pieces of slag.

The soil, slag, and aqueous rinsate blank samples were analyzed by Test America Laboratories for Target Analyte List (TAL) metals analyses, including mercury; isotopic thorium (IsoTh), isotopic uranium (IsoU), Radium-226, and Radium-228 by alpha spectroscopy; and radioisotopes by gamma spectroscopy. Analytical results indicate concentrations of radionuclides found in the slag and soil to be significantly higher than at background conditions.

On May 1 and 2, 2014, USEPA Pre-Remedial Program and Weston Solutions, Inc. personnel collected radon and thoron concentration measurements from locations on and in the vicinity of the 738 UMR Site. At the selected locations in background areas, above the source material, and off the source area, radon and thoron concentration measurements in picocuries per liter (pCi/L) were collected with RAD7 radon detectors. The radon and thoron measurements were collected at heights of one meter above the ground surface. There were no radon or thoron concentrations that exceeded the site-specific background, nor were there any adjusted concentrations that equaled or exceeded a value two standard deviations above the mean site-specific background concentration for that radionuclide in that type of sample.

Based on an evaluation of the above conditions, 738 Upper Mountain Road Site did not qualify for the National Priority List. However, it was determined that further assessment should be performed and the Site was referred to the USEPA Removal Program.

On September 23, 2016, OSC Daly was assigned as the lead On-Scene Coordinator (OSC) for 738 Upper Mountain Road Site to conduct the Removal Site Evaluation.

